Addendum No. 1

Project Manual for

"Proposed Bridge Repair of Cranehill Drive over Ivy Creek"

City of Lynchburg, VA

Engineering Commission No. 03026D

By: Schwartz & Associates, Inc.
Consulting Engineers

NOTE: PLEASE ATTACH THIS ADDENDUM TO YOUR PROJECT MANUAL FOR THE REFERENCED PROJECT. THIS ADDENDUM IS HEREBY MADE A PART OF THE ORIGINAL SPECIFICATIONS AND PLANS ON WHICH THE CONTRACT IS BASED AND IS ISSUED TO MODIFY, EXPLAIN OR CORRECT THE ORIGINAL SPECIFICATIONS. ACKNOWLEDGE RECEIPT OF ADDENDUM IN SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

The Project Manual and Contract Drawings are revised as follows:

REVISED 2/23/04

1. Bid Opening has been changed to March 1, 2004 at 11:00 a.m.

2. All questions from contractors concerning this project shall be submitted to Tammy Farmer (City of Lynchburg) by February 25, 2004 at 2:00 p.m.

3. Bid Proposal Form, pages B2, B3 and B4 have been revised because of quantity changes due to site closure. Bid Item Numbers 11, 20, 25, 42, 51 and 52 have been revised. A copy of the revised pages are attached. **Please insert the revised pages in your bid package.**

4. All references made in Project Manual and Drawings to "General Specifications and Standard Drawings for the City of Lynchburg, 1978 revision, 19th printing" shall now be referencing the Manual of Specifications and Standard Details, 2003, City of Lynchburg.

5. Sheets 1, 3, 4, 5, 6, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 26 of the plans have been revised due to closing the bridge to traffic. Copies of the revised sheets are attached.

6. The existing bridge has approximately 127 tons of structural steel.

7. The City of Lynchburg will allow the existing 12" diameter waterline to be temporarily taken out of service during substructure concrete repair if requested by the contractor. If the contractor requests the waterline to be temporarily taken out of service and the existing water values do not completely shut off water, the contractor shall temporarily plug and anchor both ends of the line and restore, as directed by the Engineer, the existing waterline back in service after substructure work is completed. All costs for this work shall be borne by the contractor with no additional costs to the City of Lynchburg.

8. The following Special Provisions have been revised and copies are attached:

   - Maintenance of Traffic - Page V-2, V-3, V-4
   - Substructure Concrete Repair - Page V-23
   - Encase Caps - Page V-26
   - Bearing Replacement - Page V-28 and V-29
   - Jacking and Blocking Superstructure - Page V-38 and V-39

BID ITEM LIST

NO MAJOR ITEMS & NO PRICE ADJUSTMENTS

ITEM NUMBER	DESCRIPTION	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LUMP SUM	LUMP SUM	$_____
2	REMOVE PORTION OF EXIST. STR. # 8010	LUMP SUM	LUMP SUM	$_____
3	REPLACE WATERLINE SUPPORTS	LUMP SUM	LUMP SUM	$_____
4	JACKING & BLOCKING SUPERSTRUCTURE	LUMP SUM	LUMP SUM	$_____
5	REPAIR RIPRAP	LUMP SUM	LUMP SUM	$_____
6	CONCRETE CLASS A4	245.7 CU. YDS.	$_____	$_____
7	SHOTCRETE CLASS B	160 SQ. FT.	$_____	$_____
8	SUBSTRUCTURE CONCRETE REPAIR	594 SQ. FT.	$_____	$_____
9	ENCASE CAPS	99 LIN. FT.	$_____	$_____
10	ENCASE STEMS	44.3 LIN. FT.	$_____	$_____
11	EPOXY COATED REINFORCING STEEL	58,640 LBS.	$_____	$_____
12	BRIDGE DECK GROOVING	812 SQ. YDS.	$_____	$_____
13	CONCRETE PARAPET	442 LIN. FT.	$_____	$_____
14	WATERPROOFING CLASS III	1103 SQ. YDS.	$_____	$_____
15	PREFORMED ELASTOMERIC JOINT SEALER (3")	54 LIN. FT.	$_____	$_____
16	PREFORMED ELASTOMERIC JOINT SEALER (4")	54 LIN. FT.	$_____	$_____
17	SURFACE PREPARATION CLASS IV	1987 SQ. FT.	$_____	$_____
18	REPLACE BEARINGS	36 EACH	$_____	$_____
19	REPLACE ANCHOR BOLTS	72 EACH	$_____	$_____
20	~~TRAFFIC BARRIER SERVICE CONCRETE PARAPET (SINGLE FACE) (MOD'FD)~~	~~456 LIN. FT~~.	**DELETED**	**DELETED**
21	ASPHALT CONCRETE, TYPE SM 9.5D	100 TONS	$_____	$_____
22	ASPHALT CONC. BASE COURSE TYPE BM-37.5	105 TONS	$_____	$_____
23	AGGR. BASE MATERIAL TYPE I, SIZE #21-B	60 TONS	$_____	$_____
24	CRUSHER RUN AGGR. NO. 25 OR NO. 26	50 TONS	$_____	$_____

ITEM NUMBER	DESCRIPTION	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL AMOUNT
25	FLEXIBLE PAVEMENT PLANING 1 1/2" DEPTH	530 S.Y.	$_____	$_____
26	DROP INLET ST'D. DI-2F (H=7.5', L=16')	1 EACH	$_____	$_____
27	DROP INLET ST'D. DI-2F (H=5.5', L=16')	1 EACH	$_____	$_____
28	DROP INLET SILT TRAP (ST'D EC-6)	2 EACH	$_____	$_____
29	TEMPORARY SILT FENCE(ST'D. EC-5)	455 L.F.	$_____	$_____
30	SILTATION CONTROL EXCAV.	60 C.Y.	$_____	$_____
31	CONSTRUCTION SURVEYING	LUMP SUM	LUMP SUM	$_____
32	MAINTENANCE OF TRAFFIC	LUMP SUM	LUMP SUM	$_____
33	ALLAYING DUST	100 HOURS	$_____	$_____
34	DEMOLITION OF PAVEMENT	183 S.Y.	$_____	$_____
35	HYDRAULIC CEMENT CONC. SIDEWALK (4" DEPTH)	80 S.Y.	$_____	$_____
36	FACEDOWN SIDEWALK (CITY ST'D.) (4" DEPTH)	12 S.Y.	$_____	$_____
37	RADIAL FACEDOWN CURB (CITY ST'D.)	40 L.F.	$_____	$_____
38	EXPOSED AGGR. SIDEWALK (4" DEPTH)	3 S.Y.	$_____	$_____
39	CURB & GUTTER (CITY ST'D.)	214 L.F.	$_____	$_____
40	RADIAL CURB & GUTTER (CITY ST'D.)	65 L.F.	$_____	$_____
41	RADIAL ST'D. CG-2 CURB	32 L.F.	$_____	$_____
42	~~TRAFFIC BARRIER SERVICE, CONCRETE~~	~~424 LIN. FT~~	**DELETED**	**DELETED**
43	SEEDING	LUMP SUM	LUMP SUM	$_____
44	GUARDRAIL ST'D. GR-2	50 L.F.	$_____	$_____
45	GUARDRAIL TERMINAL ST'D. GR-9 (NCHRP-350)	2 EACH	$_____	$_____
46	GUARDRAIL TERMINAL ST'D. GR-9 (MOD.) (NCHRP-350)	2 EACH	$_____	$_____
47	FIXED OBJECT ATTACHMENT GR-FOA-2 TYPE I (RUN-ON)	1 EACH	$_____	$_____
48	FIXED OBJECT ATTACHMENT GR-FOA-2 TYPE I (RUN-ON)(MOD.)	1 EACH	$_____	$_____
49	FIXED OBJECT ATTACHMENT GR-FOA-1 TYPE I (RUN-ON)	1 EACH	$_____	$_____

ITEM NUMBER	DESCRIPTION	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL AMOUNT
50	FIXED OBJECT ATTACHMENT GR-FOA-1 TYPE I (RUN-ON)(MOD.)	1 EACH	$_____	$_____
51	FURNISH PORTABLE CHANGEABLE MESSAGE SIGN	3 EACH	$_____	$_____
52	PORTABLE CHANGEABLE MESSAGE SIGN	1,008 HOURS	$_____	$_____

TOTAL BASE BID $_____

ALTERNATE #1 **(CRANEHILL DRIVE OVER IVY CREEK St. # 8010)**

1	RECOAT EXISTING STRUCTURE	LUMP SUM	LUMP SUM	$_____
2	ENVIRONMENTAL PROTECTION, HEALTH & SAFETY	LUMP SUM	LUMP SUM	$_____
3	DISPOSAL OF MATERIAL, TYPE B	LUMP SUM	LUMP SUM	$_____

TOTAL ALTERNATE #1 $_____

ALTERNATE #2 **(CRANEHILL DRIVE OVER IVY CREEK St. # 8010)**

1	PREPARE & OVERCOAT EXISTING STRUCTURE	LUMP SUM	LUMP SUM	$_____
2	ENVIRONMENTAL PROTECTION, HEALTH & SAFETY	LUMP SUM	LUMP SUM	$_____
3	DISPOSAL OF MATERIAL, TYPE B	LUMP SUM	LUMP SUM	$_____

TOTAL ALTERNATE #2 $_____

ALTERNATE #3 **(CRANEHILL DRIVE OVER IVY CREEK St. # 8010)**

1	PEDESTRIAN FENCE "SIDEWALK SIDE ONLY"	221 LIN.FT.	$_____	$_____

TOTAL ALTERNATE #3 $_____

ALTERNATE #4 **(CRANEHILL DRIVE OVER IVY CREEK St. # 8010)**

1	PEDESTRIAN FENCE "BOTH SIDES"	442 LIN.FT.	$_____	$_____

TOTAL ALTERNATE #4 $_____

SPECIAL PROVISION II
MAINTENANCE OF TRAFFIC

PART 1 - GENERAL

1.01 DESCRIPTION

This work shall consist of maintenance & protection of pedestrian & vehicular traffic through or around areas of construction. It shall include: covering & uncovering existing signs, furnishing, erecting & maintenance of new construction signs, sign posts; Flags, Group 2 channelizing devices, Type III Barricades, drums, placement & removal of temporary pavement markings and all other items used for traffic maintenance ,as required, by the Contract Drawings, Project Manual and the Virginia Work Area Protection Manual. It also includes: the furnishing of flagmen, lights, vertical panels. At the completion of this project the construction signs & sign posts shall be removed by the Contractor and shall remain the property of the Contractor. This item also includes all costs associated with lighting & barricading the work areas from pedestrians & motorists according to the plan developed by the CONTRACTOR and approved by the ENGINEER.

In addition, it shall include all costs associated with providing, at all times, safe pedestrian access to all business and residences within the limits of the signs erected for the project.

All work shall be scheduled and performed, in such a manner, as to provide a minimum of interference and maximum protection to traffic and workmen. In no case shall traffic be stopped for more than five (5) minutes at a time.

The Contractor will be given a marked up sheet (in color) showing approximate location for temporary pavement line markings, prior to mobilization. The City will furnish and install final pavement markings.

The CONTRACTOR shall take adequate precautions to prevent material, sand or other debris from being spilled, blown, or tracked onto traveled roadways (including creek) throughout the duration of this project. Should any material get onto a traveled roadway or creek, the CONTRACTOR shall immediately stop work and have it removed. The ENGINEER may stop work, if conditions warrant, due to blowing sand.

The CONTRACTOR shall notify the City Traffic Engineer ten (10) days (minimum) prior to installing the traffic control, in order for the City to put out a press release concerning this project.

1.02 METHOD OF MEASUREMENT

"Maintenance of Traffic" will be paid for on a "Lump-Sum" basis wherein no measurement will be made.

1.03 BASIS OF PAYMENT

Maintenance of traffic will be paid for at the Contract "Lump-Sum" price, which price shall be full compensation for: covering & uncovering existing signs, furnishing, installing, erecting, maintenance & removal of new construction signs, sign posts, vertical panels, flags, Group 2 channelizing devices, Type III Barricades, drums, lights and all costs for flagmen. It further includes: placement & removal of temporary pavement markings. Also, included is: lighting & barricading the work area from pedestrians & motorists; providing safe pedestrian & motorists access to all businesses & residences; and for all materials, labor, tools, equipment & incidentals necessary to complete the work. Payment will be made under the Contract pay item:

"MAINTENANCE OF TRAFFIC" - Pay unit will be on a "Lump-Sum" basis.

MAINTENANCE OF TRAFFIC – "LUMP SUM" PRICE INCLUDES THE FOLLOWING FOR CRANEHILL DRIVE OVER IVY CREEK (#8010).

ALL TEMPORARY PAVEMENT MARKINGS SHALL BE TYPE "D".

	4" Yellow Type "D"	4" White Type "D"
Totals	150'	150'

THE QUANTITIES SHOWN ABOVE ARE FOR ESTIMATING PURPOSES ONLY. ACTUAL FIELD CONDITIONS MAY REQUIRE FIELD ADJUSTMENTS TO MARKINGS AS DEEMED NECESSARY BY THE ENGINEER.

CONTRACTOR SHALL CONTACT ENGINEER, PRIOR TO MOBILIZATION, TO OBTAIN SKETCHES CONCERNING PLACEMENT OF TEMPORARY PAVEMENT MARKINGS.

REV. 2-23-04

SPECIAL PROVISION VIII

SUBSTRUCTURE CONCRETE REPAIR

A. GENERAL

This item consists of blasting concrete and reinforcing steel, forming and placing A4 concrete and bonding epoxy on existing concrete and reinforcing steel, curing concrete and removal of forms, all in accordance with the Contract Drawings and these Special Provisions.

B. OTHER ITEMS TO BE CONSIDERED DURING SUBSTRUCTURE CONCRETE REPAIR

1. Substructure concrete repair under the beams shall be complete before casting deck. Substructure concrete repair shall be complete and concrete shall have obtained a minimum compressive strength of 4,000 psi before placement of deck concrete.

C. METHOD OF MEASUREMENT

Substructure Concrete Repair will be measured on a square footage basis for the original surface area (area of bonded surface between new and original concrete) of substructure actually repaired.

SPECIAL PROVISION X

ENCASE CAPS

A. GENERAL

This item consists of blasting concrete and reinforcing steel, forming and placing A4 concrete and bonding epoxy on existing concrete and reinforcing steel, curing concrete and removal of forms, all in accordance with the Contract Drawings and these Special Provisions.

B. OTHER ITEMS TO BE CONSIDERED DURING "ENCASE CAPS"

1. "Encase Caps" under the beams shall be complete before casting deck. "Encase Caps" shall be complete and concrete shall have obtained a minimum compressive strength of 4,000 psi before placement of deck concrete.

2. “Encase Caps” shall include monolithically casting the raised bearing seats.

C. METHOD OF MEASUREMENT

Encase Caps will be measured on a linear foot basis for the length of caps actually encased.

D. BASIS OF PAYMENT

The unit price shown in the contract for "Encase Caps" shall be full compensation for blasting exposed reinforcing steel and faces of existing concrete the new concrete will bond to, placing Bonding Epoxy and concrete, forming, curing concrete, removal of forms, and for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of:

1. "Encase Caps" and the pay unit will be on a "linear foot" basis for the length of original cap actually encased.

SECTION V

SPECIAL PROVISION XII Rev. 2-23-04

BEARING REPLACEMENT

A. GENERAL

This item shall consist of removing existing elastomeric bearing pads and sole plates, furnishing & placing new stub stiffeners, new sole plates, elastomeric bearing pads and coating underside of sole plates with epoxy grit in accordance with Specifications, Section 408.03, all in accordance with the Contract Drawings and these Special Provisions.

B. OTHER ITEMS TO BE CONSIDERED DURING BEARING REPLACEMENT:

1. Bearing replacements shall be complete before casting of deck.

2. Anchor Bolt Replacement shall be accomplished during the phase of work for Encase Caps or Substructure Concrete Repair. See separate Special Provisions for these bid items.

3. Tighten anchor bolt nuts to finger tight condition after bearing replacement is complete.

C. METHOD OF MEASUREMENT

Bearing Replacement will be measured as one bearing replacement per bearing actually replaced.

D. BASIS OF PAYMENT

The unit price shown in the contract for this item shall be full compensation for loosening nuts, cutting and removing existing sole plates & elastomeric bearings, blasting and applying epoxy and grit to underside of new sole plates, furnishing and installing new stub stiffeners & new sole plates & laminated elastomeric bearing pads, and the furnishing of all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of "Bearing Replacement," and the pay unit will be an "each" basis per bearing actually replaced.

SPECIAL PROVISION XIX

JACKING AND BLOCKING SUPERSTRUCTURE

A. GENERAL

The Contractor shall provide the Engineer with a workable plan for jacking and supporting the existing beams during "Jacking and Blocking Superstructure." The Contractor shall submit drawings and structural calculations (stamped by a Virginia Registered Professional Engineer) to the Engineer, for review, giving all details of the proposed method of Jacking and Blocking the structural steel.

This item consists of simultaneously jacking and blocking all 6 beam ends at Abutments and all 12 beam ends at piers (jack at one substructure unit at a time), lowering beams back down and removing the jacking and blocking system, all in accordance with the Contract Drawings and these Special Provisions.

B. OTHER ITEMS TO BE CONSIDERED DURING JACKING AND BLOCKING SUPERSTRUCTURE

1. Note that all 6 ends of beams at Abutments shall be jacked and supported simultaneously and all 12 ends of beams at piers shall be jacked and supported simultaneously.

2. Special care shall be taken during jacking operations to prevent damage to existing waterline and support system. Roller supports shall be kept snug at all times.

3. Beams shall be raised a maximum of approximately 3 1/2" by jacking simultaneously unless otherwise directed by the Engineer. At all times, the beams being raised or lowered shall be kept within 1/4" (measured at each bearing) of each other.

4. All timber used shall be of a good grade of sound oak, free of splits and flat on each side. Timber shall be sized, at Contractors expense, as necessary to meet field conditions.

5. In no case shall the Contractor leave Piers or Abutments with beams supported fully or partially by jacks.

6. All jacks used shall have a lock nut feature.

7. Superstructure directly above pier stem encasement and pier cap encasement and abutment seat repairs shall be supported directly from the ground or pier footings prior to removal of existing substructure concrete and until the new concrete is placed and reaches full strength.

8. The item “Jacking and Blocking Superstructure” covers all raising and lowering of beams necessary to complete this project.

9. Beams shall be within 1/8” of their final position when the pier cap encasement is completed.

C. METHOD OF MEASUREMENT

Jacking and Blocking Superstructure will be paid for on a “Lump Sum” basis.

D. BASIS OF PAYMENT

The Lump Sum price shown in the contract for this item shall be full compensation for providing drawings and calculations for proposed methods of jacking and supporting structural steel, as well as furnishing and installing such supports, performing the jacking operation, lowering beams, removing the jacking and support system and the furnishing of all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of “Jacking and Blocking Superstructure,” and the pay unit will be “Lump Sum.”